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Search Results - Record(s) 1 through 10 of 12 returned.

☐ 1. Document ID: US 6217851 B1

L4: Entry 1 of 12 File: USPT Apr 17, 2001

US-PAT-NO: 6217851
DOCUMENT-IDENTIFIER: US 6217851 B1

TITLE: Anti-caries oral compositions

DATE-ISSUED: April 17, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kleinberg; Israel	Smithtown	NY		
Acevedo; Ana Maria	Caracas			VE
Chatterjee; Robi	South Setanket	NY		

US-CL-CURRENT: 424/49; 424/687

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 2. Document ID: US 5013542 A

L4: Entry 2 of 12 File: USPT May 7, 1991

US-PAT-NO: 5013542
DOCUMENT-IDENTIFIER: US 5013542 A
**** See image for Certificate of Correction ****

TITLE: Method to inhibit adhesion of disease-causing microorganisms to teeth

DATE-ISSUED: May 7, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hay; Donald I.	Wayland	MA		
Gibbons; Ronald J.	Boston	MA		
Moreno; Edgard G.	Nahant	MA		

US-CL-CURRENT: 424/54; 514/12, 514/21

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 3. Document ID: US 4683292 A

L4: Entry 3 of 12 File: USPT Jul 28, 1987

US-PAT-NO: 4683292
DOCUMENT-IDENTIFIER: US 4683292 A

TITLE: Immunotherapeutic polypeptide agents which bind to lymphocyte immunoglobulin FC receptors

DATE-ISSUED: July 28, 1987

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hahn; Gary S.	San Diego	CA		

US-CL-CURRENT: 530/328; 930/10, 930/20, 930/DIG.785, 930/DIG.788, 930/DIG.802, 930/DIG.811

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 4. Document ID: US 4585757 A

L4: Entry 4 of 12 File: USPT Apr 29, 1986

US-PAT-NO: 4585757
DOCUMENT-IDENTIFIER: US 4585757 A
** See image for Certificate of Correction **

TITLE: Hypotensive active peptides

DATE-ISSUED: April 29, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Pang; Peter K. T.	Lubbock	TX		
Tenner, Jr.; Thomas E.	Lubbock	TX		

US-CL-CURRENT: 514/18; 514/19, 930/10, 930/20, 930/70, 930/DIG.820

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 5. Document ID: US 4499068 A

L4: Entry 5 of 12 File: USPT Feb 12, 1985

US-PAT-NO: 4499068
DOCUMENT-IDENTIFIER: US 4499068 A
** See image for Certificate of Correction **

TITLE: Oral compositions comprising N.sup.G -alkyl derivatives of arginine

DATE-ISSUED: February 12, 1985

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Silbering; Steven B.	Plainsboro	NJ		
Sipos; Tibor	Lebanon	NJ		

US-CL-CURRENT: 424/52; 424/54, 562/560

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 6. Document ID: US 4499067 A

L4: Entry 6 of 12 File: USPT Feb 12, 1985

US-PAT-NO: 4499067
DOCUMENT-IDENTIFIER: US 4499067 A

TITLE: Oral compositions comprising N.sup.G -acyl derivatives of arginine

DATE-ISSUED: February 12, 1985

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Silbering; Steven B.	Plainsboro	NJ		
Sipos; Tibor	Lebanon	NJ		

US-CL-CURRENT: 424/52; 424/54, 554/38, 554/47, 554/53, 562/560

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

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☐ 7. Document ID: US 4486403 A

L4: Entry 7 of 12 File: USPT Dec 4, 1984

US-PAT-NO: 4486403
DOCUMENT-IDENTIFIER: US 4486403 A

TITLE: Composition for and treatment of teeth

DATE-ISSUED: December 4, 1984

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Mechanic; Gerald	Chapel Hill	NC	27514	
Binderman; Itzhak	Tel-Aviv			IL

US-CL-CURRENT: 424/54; 424/49

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 8. Document ID: US 4477429 A

L4: Entry 8 of 12 File: USPT Oct 16, 1984

US-PAT-NO: 4477429
DOCUMENT-IDENTIFIER: US 4477429 A

TITLE: Oral compositions comprising N.sup..alpha. -alkyl derivatives of arginine

DATE-ISSUED: October 16, 1984

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Silbering; Steven B.	Plainsboro	NJ		
Sipos; Tibor	Lebanon	NJ		

US-CL-CURRENT: 424/52; 424/54, 562/560

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 9. Document ID: US 4477428 A

L4: Entry 9 of 12 File: USPT Oct 16, 1984

US-PAT-NO: 4477428
DOCUMENT-IDENTIFIER: US 4477428 A

TITLE: Oral compositions comprising N.sup..alpha.,N.sup.G -diacyl derivatives of arginine

DATE-ISSUED: October 16, 1984

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Silbering; Steven B.	Plainsboro	NJ		
Sipos; Tibor	Lebanon	NJ		

US-CL-CURRENT: 424/52; 424/54, 554/106, 554/107, 562/560

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw D

☐ 10. Document ID: US 4339431 A

L4: Entry 10 of 12 File: USPT Jul 13, 1982

US-PAT-NO: 4339431
DOCUMENT-IDENTIFIER: US 4339431 A

TITLE: Anticalculus oral composition

DATE-ISSUED: July 13, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gaffar; Abdul	Somerset	NJ		

US-CL-CURRENT: 424/54; 424/49

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw. D

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4225579	12

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Search Results - Record(s) 11 through 12 of 12 returned.

☐ 11. Document ID: US 4339430 A

L4: Entry 11 of 12 File: USPT Jul 13, 1982

US-PAT-NO: 4339430
DOCUMENT-IDENTIFIER: US 4339430 A

TITLE: Antibacterial oral composition

DATE-ISSUED: July 13, 1982

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Gaffar; Abdul	Somerset	NJ		

US-CL-CURRENT: 424/54; 424/49

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

☐ 12. Document ID: US 4225579 A

L4: Entry 12 of 12 File: USPT Sep 30, 1980

US-PAT-NO: 4225579
DOCUMENT-IDENTIFIER: US 4225579 A

TITLE: Means and method for improving defenses against caries

DATE-ISSUED: September 30, 1980

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kleinberg; Israel	Smithtown	NY	11787	

US-CL-CURRENT: 424/48; 260/1, 424/54, 514/2, 530/330, 530/331, 930/10

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw De

Clear | Generate Collection | Print | Fwd Refs | Bkwd Refs | Generate OACS

Terms	Documents

4225579	12

Display Format: CIT Change Format

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L4: Entry 3 of 12 File: USPT Jul 28, 1987

US-PAT-NO: 4683292
DOCUMENT-IDENTIFIER: US 4683292 A

TITLE: Immunotherapeutic polypeptide agents which bind to lymphocyte immunoglobulin FC receptors

DATE-ISSUED: July 28, 1987

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hahn; Gary S.	San Diego	CA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Immunetech, Inc.	San Diego	CA			02

APPL-NO: 06/ 522602 [PALM]
DATE FILED: August 12, 1983

INT-CL: [04] C07K 7/06

US-CL-ISSUED: 530/328
US-CL-CURRENT: 530/328; 930/10, 930/20, 930/DIG.785, 930/DIG.788, 930/DIG.802, 930/DIG.811

FIELD-OF-SEARCH: 260/112.5R

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	3778426	December 1973	Najjar	260/112.5R
☐	4153688	May 1979	Dimicoli et al.	260/112.5R
☐	4161522	July 1979	Hamburger	260/112.5R
☐	4171299	October 1979	Hamburger	260/112.5R
☐	4201770	May 1980	Stevens	424/177
☐	4215112	July 1980	Goldstein et al.	260/112.5R
☐	4223016	September 1980	Roy et al.	260/112.5R
☐	4225579	September 1980	Kleinberg	260/112.5R
	4284537	August 1981	Beachey	260/6

☐				
☐	4341755	July 1982	Lindall	424/1
☐	4369138	January 1983	Lindall	260/112.5R
☐	4388233	June 1983	Bissell et al.	548/159
☐	4407948	October 1983	Goodman et al.	435/91
☐	4409141	October 1983	Noda et al.	260/112.5R
☐	4409144	October 1983	Heinicke	260/112.5R
☐	4415493	November 1983	Weigle et al.	260/112.5R
☐	4436874	March 1984	Aspisi et al.	525/327.1
☐	4454121	June 1984	Beachey	260/112.5R
☐	4457867	July 1984	Ishida	260/112.5R
☐	4474757	October 1984	Arnon et al.	424/88
☐	4476116	October 1984	Anik	260/112.5R
☐	4497801	February 1985	Hashimoto et al.	260/112.5R

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Synthesis of a Tetrapeptide by R. B. Merrifield, Journal of American Chemical Society (vol. 85, pp. 85, pp. 2 2154 (1963)).

ART-UNIT: 153

PRIMARY-EXAMINER: Phillips; Delbert R.

ATTY-AGENT-FIRM: Lyon & Lyon

ABSTRACT:

An active site peptide which blocks immune complex binding to Fc receptors, the peptide having an amino acid sequence selected from the group consisting of:

A-B-C-D-E-F-G-H-I-J-K-L-M-N-O-P,

or a subgroup thereof,

wherein

A is Arg, Lys, Orn, Gln, or His;

B is Ser, Thr, Ala, or Gly;

C is Thr, Ser, Ala, or Gly;

D is Thr, Ser, Ala, or Gly;

E is Lys, Arg, Orn or His;

F is Thr, Ser, Ala, or Gly;

G is Ser, Thr, Ala, or Gly;

H is Gly, Ala, Thr, Ser, Lys, Arg, or Orn

I is Pro, Val, Leu, Ile, or Ala;

J is Arg, Lys, Orn, or His;

K is Ala, Thr, Ser, or Gly;

L is Ala, Thr, Ser, or Gly;

M is Pro, Val, Leu, Ile, or Ala;

N is Glu, or Asp;

O is Val, Leu, Ile, or Ala;

P is Tyr, or Phe.

and pharmaceutically acceptable salts thereof.

1 Claims, 4 Drawing figures

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L3: Entry 42 of 57 File: USPT Nov 11, 1997

US-PAT-NO: 5686075
DOCUMENT-IDENTIFIER: US 5686075 A

TITLE: Synthetic peptide vaccines for dental caries

DATE-ISSUED: November 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Taubman; Martin A.	Newtonville	MA		
Smith; Daniel J.	Natick	MA		

US-CL-CURRENT: 424/197.11; 424/185.1, 424/190.1, 424/193.1, 424/194.1, 530/324, 530/350

CLAIMS:

We claim:

1. An immunogenic composition comprising a peptide consisting of at least one amino acid sequence selected from the group consisting of:

a) DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4), and

b) PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2); and a physiologically compatible carrier.

2. An immunogenic composition comprising at least two peptides, wherein at feast one peptide consists of an amino acid sequence of either DANFDSIRVDAVDNVDADLLQI (SEQ ID NO: 1) or PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2) where both sequences are of the catalytic domain of streptococcal glucosyltransferase, and at least one peptide consists of an amino acid sequence of either TGAQTIKGQKLYFKANGQQVKG (SEQ ID NO: 3) or DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4) where both sequences are of the glucan-binding domain of streptococcal glucosyltransferase, and a physiologically compatible carrier.

3. An immunogenic composition of claim 2 where 2 or more of said peptides of the streptococcal glucosyltransferase protein are present and attached to a core matrix of 3 or more lysines.

4. The immunogenic composition of claim 1 wherein said composition induces in a mammal an immune response that is both a B cell response and a T cell response.

5. The immunogenic composition of claim 4 wherein the B cell immune response produces antibodies of the IgG or the IgA isotype.

6. An immunogenic composition comprising at least two peptides of a streptococcal

glucosyltransferase protein covalently attached to a lysine core matrix, wherein each peptide consists of an amino acid sequence selected from the group consisting of:

a) DANFDSIRVDAVDNVDADLLQI (SEQ ID NO: 1),

b) TGAQTIKGQKLYFKANGQQVKG (SEQ ID NO: 3),

c) DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4),

d) QWNGESEKPYDDHL (SEQ ID NO: 5), and

e) PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2); and

a physiologically compatible carrier.

7. The immunogenlc composition of claim 6 having at least one additional immunologic component, which produces an immunogenic response against an infectious organism, covalently attached to said lysine core matrix, wherein said additional immunogenic component is a peptide comprising an amino acid sequence from an immunologic domain selected from the group consisting of diphtheria, pertussis, tetanus and measles.

8. The immunogenic composition of claim 6 wherein the lysine core matrix consists of at least three lysines.

9. The immunogenic composition of claim 6 wherein said composition induces in a mammal an immune response that is a B cell response, a T cell response or both a B cell response and a T cell response.

10. The immunogenic composition of claim 9 wherein both the B cell response and T cell response are elicited by the same amino acid sequence.

11. The immunogenic composition of claim 10 wherein the B cell immune response produces antibodies of the IgG or the IgA isotype.

12. An immunogenic composition of claim 6 comprising 4 peptides, where

a) the 4 peptides are the same or different;

b) each peptide consists of an amino acid sequence selected from the group consisting of DANFDSIRVDAVDNVDADLLQI (SEQ ID NO: 1), PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2) where both sequences are of the catalytic domain of streptococcal glucosyltransferase, the amino acid sequence DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4) of the glucan binding domain of streptococcal glucosyltransferase, and the amino acid sequence QWNGESEKPYDDHL (SEQ ID NO: 5) of the native streptoeoecal glucosyltransferase surface domain; and

c) the 4 peptides are attached to a core matrix of 3 lysines.

13. An immunogenic composition of claim 12 wherein said composition induces in a mammal an immune response that results in the reduction of the colonization or accumulation of mutans streptococcal strains in a mammal to whom the immunogenic composition is administered.

14. An immunogenic composition comprising a peptide consisting of an amino acid sequence of PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2) and a physiologically compatible carrier.

15. A method of interfering with the enzymatic activity of streptococcal glucosyltransferase in a mammal comprising the administration of a peptide consisting of an amino acid sequence of PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2) to a mammal in a manner that raises an immune response in the mammal, thereby interfering with the enzymatic activity of streptococcal glucosyltransferase in the mammal.

16. A method of provoking an immune response to streptococcal glucosyltransferase in a mammal comprising the administration of a peptide consisting of an amino acid sequence of either PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2) or DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4) in a manner that raises an immune response in the mammal.

17. The method of claim 16 wherein said immune response results in reduction of the colonization or accumulation of mutans, streptococcal strains in the mammal to whom the peptide is administered.

18. An immunogenic composition comprising a peptide consisting of an amino acid sequence of DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4) and a physiologically compatible carrier.

19. A method of interfering with the glucan-binding activity of streptococcal glucosyltransferase in a mammal comprising the administration of a peptide consisting of an amino acid sequence of DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4) in a manner that induces a response which thereby interferes with the glucan-binding activity of streptococcal glucosyltransferase in the mammal.

20. An immunogenic composition comprising at least two peptides covalently attached to at least one additional immunologic component which produces an immunogenic response against an infectious organism, wherein each peptide is selected from the group consisting of:

a) DANFDSIRVDAVDNVDADLLQI (SEQ ID NO: 1);

b) PLDKRSGLNPLIHNSLVDREVDDRE (SEQ 1D NO: 2);

c) TGAQTIKGQKLYFKANGQQVKG (SEQ ID NO: 3);

d) DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4); and

e) QWNGESEKPYDDHL (SEQ ID NO: 5); and

a physiologically compatible carrier, wherein said additional immunologic component is a peptide comprising an amino acid sequence from an immunologic domain selected from the group consisting of diphtheria, pertussis, tetanus and measles.

21. An immunogenic composition comprising a peptide covalently attached to at least one additional immunologic component which produces an immunogenic response against an infectious organism, wherein said peptide is selected from the group consisting of:

a) DANFDSIRVDAVDNVDADLLQI (SEQ ID NO: 1);

b) PLDKRSGLNPLIHNSLVDREVDDRE (SEQ ID NO: 2);

c) TGAQTIKGQKLYFKANGQQVKG (SEQ ID NO: 3);

d) DGKLRYYDANSGDQAFNKSV (SEQ ID NO: 4); and

e) QWNGESEKPYDDHL (SEQ ID NO: 5); and

a physiologically compatible carrier, wherein said additional immunologic component is a peptide comprising an amino acid sequence from an immunologic domain selected from the group consisting of diphtheria, pertussis, tetanus and measles.

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L3: Entry 42 of 57 File: USPT Nov 11, 1997

US-PAT-NO: 5686075
DOCUMENT-IDENTIFIER: US 5686075 A

TITLE: Synthetic peptide vaccines for dental caries

DATE-ISSUED: November 11, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Taubman; Martin A.	Newtonville	MA		
Smith; Daniel J.	Natick	MA		

ASSIGNEE-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY	TYPE CODE
Forsyth Dental Infirmary for Children	Boston	MA			02

APPL-NO: 08/ 057162 [PALM]
DATE FILED: April 30, 1993

PARENT-CASE:
RELATED APPLICATION This application is a continuation-in-part of application Ser. No. 07/877,295, now abandoned, entitled "Synthetic Peptide Vaccines for Dental Caries" by Martin A. Taubman and Daniel J. Smith, filed May 1, 1992. The teachings of application Ser. No. 07/877,295 now abandoned, are incorporated herein by reference.

INT-CL: [06] A61 K 39/09

US-CL-ISSUED: 424/197.11; 124/185.1, 124/190.1, 124/193.1, 124/194.1, 530/324, 530/350
US-CL-CURRENT: 424/197.11; 424/185.1, 424/190.1, 424/193.1, 424/194.1, 530/324, 530/350

FIELD-OF-SEARCH: 424/88, 424/92, 424/185.1, 424/190.1, 424/193.1, 424/194.1, 424/197.11, 424/244.1, 530/350, 530/324, 530/325, 530/326

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected Search ALL Clear

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4150116	April 1979	Taubman et al.	424/88
☐	4250262	February 1981	Taubman et al.	435/193
	4438200	March 1984	Taubman et al.	435/193

4894229	January 1990	Polson et al.	424/92

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0328403	August 1989	EP	
WO91/07979	June 1991	WO	

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M.T. Dertzbaugh et al., "Cholera Toxin B-Subunit Fusion: Structural and Functional Analysis of the Chimeric Protein," Infection and Immunity, 58(1): 70-79 (1990, Jan.).
Taubman, M. et al., "T Cell Epitopes on Synthetic Peptides from the Glucan Binding and Catalytic Regions of Mutants streptocci", Abstract and poster presentation at IADR General Session, Glasgow, Scotland, Jul. 1-4, 1992 (abstract pub. J. Dent. Res. 71, p. 577, abstract #491 (1992)).
Ellis in Vaccines Chapter 29 Plutkin et al. Eds WB Saunders Co p. 573, 1988.
Taubman et al INfection and Immunity vol. 63 No. 8:3088-3093, Aug. 1995.
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ART-UNIT: 186

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ABSTRACT:

Immunization of animals with a composition containing either an amino acid sequence from the catalytic domain of glucosyltransferase, an amino acid sequence from the glucan-binding region of glucosyltransferase or an amino acid sequence from the native surface domain of glucosyltransferase provoke antibody and T-cell immune responses to this enzyme. Since this enzyme has been implicated in the colonization of mutans streptococci on tooth surfaces, such immune responses are important for the prevention of dental caries. Multicomponent and multivalent compositions which include these amino acid sequences provide effective vaccine capabilities.

21 Claims, 1 Drawing figures

L3: Entry 50 of 57 File: USPT May 7, 1991

US-PAT-NO: 5013542
DOCUMENT-IDENTIFIER: US 5013542 A
** See image for Certificate of Correction **

TITLE: Method to inhibit adhesion of disease-causing microorganisms to teeth

DATE-ISSUED: May 7, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hay; Donald I.	Wayland	MA		
Gibbons; Ronald J.	Boston	MA		
Moreno; Edgard G.	Nahant	MA		

US-CL-CURRENT: 424/54; 514/12, 514/21

CLAIMS:

What is claimed is:

1. A method of inhibiting the adhesion of microorganisms to a mineral surface, which method comprises:

contacting the mineral surface with an adhesive-inhibiting amount of a non-immunogenic, acidic, amino-terminal segment of an anionic proline-rich protein to inhibit the adhesion of disease-causing microorganisms to the mineral surface.

2. The method of claim 1 wherein the mineral surface comprises a manual calcium-containing surface.

3. The method of claim 1 wherein said mineral surface comprises hydroxyapatite.

4. The method o claim 1 wherein the mineral surface comprises a tooth surface.

5. The method of claim 1 wherein the anionic proline-rich protein comprises PRP 1-4, PIF-s or PIF-f.

6. The method of claim 1 which includes cleaving the proline-rich protein by enzymatic cleaving to obtain the acidic amino acid end segment of the protein and contacting the mineral surface with said cleaved amino-terminal segment.

7. The method of claim 1 wherein said segment consists essentially of the first 30 amino-acid residue of the said protein.

8. The method of claim 1 wherein said end segment comprises PCA--ASP--LEU--ASP--GLU--

ASp--VAL--P-Ser--GLN13 GLU--ASP--VAL--PRO--LEU--VAL--ILE--SER--ASP--GLY--GLY--ASP--P-SER--GLU--GL N--PHE--ILE--ASP--GLU--GLU--ARG.

9. The method of claim 1 which includes incorporating the said segment in a pharmaceutically acceptable carrier to form a composition and treating an apatitic surface of a patient with said composition.

10. The method of claim 9 which includes treating the oral cavity of a patient with said composition.

11. The contacted mineral surface prepared by the method of claim 1.

12. A method of inhibiting the adhesion of disease-causing microorganisms, which method comprises:

a) providing as an active ingredient a non-immunogenic peptide consisting essentially of the first acidici 30-residue amino-terminal segment of a proline-rich protein;

b) incorporating the said segment in a pharmaceutically acceptable carrier to form a composition; and

c) introducing the said composition into the oral cavity of a patient.

13. The treated oral cavity prepared by the method of claim 12.

14. The method of claim 1 which includes cleaving the proline-rich protein by enzymatic cleaving by the use of trypsin.

15. The method of claim 1 wherein the disease causing microorganisms are selected form the group consisting of: Streptococcus mutans, Streptococcus sanguis, Streptococcus sobrinus, Actinomyces viscosus and Bacteroides gingivalis.

16. The method of claim 12 wherein the 30 residue amino terminal segment of a proline-rich protein comprises: PCA--ASP--LEU--ASP--GLU--ASP--VAL--P-SER--GLN--GLU--ASP--VAL--PRO--LEU--VA L--ILE--SER--ASP--GLY--GLY--ASP--P-SER--GLU--GLN--PHE--ILE--ASP--GLU--GLU-- ARG.

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L3: Entry 52 of 57 File: USPT Feb 12, 1985

US-PAT-NO: 4499068
DOCUMENT-IDENTIFIER: US 4499068 A
** See image for Certificate of Correction **

TITLE: Oral compositions comprising N.sup.G -alkyl derivatives of arginine

DATE-ISSUED: February 12, 1985

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Silbering; Steven B.	Plainsboro	NJ		
Sipos; Tibor	Lebanon	NJ		

US-CL-CURRENT: 424/52; 424/54, 562/560

CLAIMS:

We claim:

1. N.sup.G -alkyl derivatives of arginine having the formula: ##STR6## where y is an integer of from 9 to 19, and the pharmaceutically acceptable salts thereof.

2. A compound of claim 1 wherein said pharmaceutically acceptable salts are selected from the group consisting of alkali metal salts, alkaline earth metal salts, amphoteric metal salts, heavy metal salts, organic base salts, and organic and inorganic acid salts.

3. The compound of claim 1 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -decylarginine.

4. The compound of claim 1 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -laurylarginine.

5. The compound of claim 1 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -myristylarginine.

6. The compound of claim 1 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -palmitylarginine.

7. The compound of claim 1 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -stearylarginine.

8. A composition of matter for oral hygiene to inhibit acid production in the oral cavity comprising an effective amount, in a pharmaceutically acceptable carrier, of an N.sup.G -alkyl derivative of arginine having the formula; ##STR7## wherein y is an integer of from 9 to 19, or a pharmaceutically acceptable salt thereof.

9. The composition of matter of claim 8 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -decylarginine.

10. The composition of matter of claim 8 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -laurylarginine.

11. The composition of matter of claim 8 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -myristylarginine.

12. The composition of matter of claim 8 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -palmitylarginine.

13. The composition of matter of claim 8 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -stearylarginine.

14. The composition of matter of claim 8 wherein said pharmaceutically acceptable carrier is a dentifrice.

15. The composition of matter of claim 8 wherein said pharmaceutically acceptable carrier is a lozenge.

16. A composition of matter for oral hygiene to inhibit the formation of caries comprising, in a pharmaceutically acceptable carrier, from about 0.0001% to about 10% of a fluoride salt and an effective amount of an N.sup.G -alkyl derivative of arginine having the formula: ##STR8## wherein y is an integer of from 0 to 29, or a pharmaceutically acceptable salt thereof.

17. The composition of matter of claim 16 wherein said pharmaceutically acceptable carrier is a mouthrinse.

18. The composition of matter of claim 16 wherein said pharmaceutically acceptable carrier is a dentifrice.

19. A composition of matter for oral hygiene to inhibit the formation of caries comprising from about 0.05 to about 10% of N.sup.G -alkyl derivative of arginine having the formula: ##STR9## wherein y is an integer of from 5 to 19, or a pharmaceutically acceptable salt thereof, in combination with from about 0.001 to about 1.0% of a fluoride salt in a pharmaceutically acceptable polyol-containing vehicle.

20. The composition of matter of claim 19 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -laurylarginine.

21. The composition of matter of claim 19 wherein said N.sup.G -alkyl derivative of arginine is N.sup.G -myristylarginine.

22. A method for inhibiting acid production by microorganisms in the oral cavity which comprises introducing into the oral cavity in a pharmaceutically acceptable carrier, an effective amount of an N.sup.G -alkyl derivative of arginine having the formula: ##STR10## wherein y is an integer of from 0 to 29, or a pharmaceutically acceptable salt thereof.

23. A method for inhibiting acid production by microorganisms in the oral cavity which comprises

introducing into the oral cavity a composition comprising, in a pharmaceutically acceptable carrier, from about 0.0001% to about 10% of a fluoride salt and an effective amount of an N.sup.G -alkyl derivative of arginine having the formula: ##STR11## wherein y is an integer of from 0 to 29, or a pharmaceutically acceptable salt thereof.

24. A method for inhibiting acid production by microorganisms in the oral cavity which comprises introducing into the oral cavity a composition comprising from about 0.05 to about 10% of N.sup.G -alkyl derivative of arginine having the formula: ##STR12## wherein y is an integer of from 5 to 19, or a pharmaceutically acceptable salt thereof, in combination with from about 0.001 to about 1.0% of a fluoride salt in a pharmaceutically acceptable polyol-containing vehicle.

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L3: Entry 56 of 57 File: USPT Mar 15, 1983

US-PAT-NO: RE31181
DOCUMENT-IDENTIFIER: US RE31181 E

TITLE: Means and method for improving natural defenses against caries

DATE-ISSUED: March 15, 1983

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kleinberg; Israel	Smithtown	NY	11787	

US-CL-CURRENT: 514/18; 260/1, 424/49, 424/52, 424/54, 514/19, 530/330, 530/331

CLAIMS:

What is claimed is

1. A method for supplementing the body's resistance to caries which comprises providing to the mouth an effective amount of a caries combatting pH rise factor which is .[.a peptide.]. .Iadd.a source of pH adjusting compound or precursor thereof .Iaddend.having 2-4 amino acid units at least one of which is arginine.

2. A method as set forth in claim 1 wherein the pH rise factor is provided in concentrations of from about 0.05 mM to about 3 mM.

3. A method as set forth in claim 1 wherein the pH rise factor is provided in combination with a dental care product.

4. A method as set forth in claim 1 wherein the pH rise factor is provided in a food product.

5. A method as set forth in claim 1 wherein the pH rise factor is provided in combination with chewing gum. .Iadd. 6. The method according to claims 1, 3, 4 or 5 wherein said pH-rise factor is applied to the mouth in association with fluoride ions. .Iaddend..Iadd. 7. The method according to claim 1 wherein said pH-rise factor is provided to the mouth in a mouth wash. .Iaddend..Iadd. 8. The method according to claim 1 wherein said pH-rise factor is provided to the mouth in tooth paste. .Iaddend..Iadd. 9. The method according to claim 1 wherein said pH-rise factor is provided in tooth powder..Iaddend.